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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,280	03/01/2004	John A. Adamovics	4727-103 US	9530

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EXAMINER

TANINGCO, MARCUS H

ART UNIT PAPER NUMBER

2878

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/790,280

Applicant(s)

ADAMOVICS, JOHN A.

Examiner

Marcus H. Taningco

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) 30-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44, 46, 47, 50-57, 59, 60 and 63-72 is/are rejected.
- 7) ☒ Claim(s) 45, 48, 49, 58, 61 and 62 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/1/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/18/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### Claim Objections

Claims 65-71 are objected to because of the following informalities: Misnumbered claims 65-71 have been renumbered 66-72. Appropriate correction is required.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-13, 64, 65, 67-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 11-13 recite the limitation "activator" in line 1 of each claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 64, 65, 67-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. **Note:** A single claim which claims both an apparatus and a process, is indefinite under 35 U.S.C. 112, second paragraph. Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990).

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### **Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 64, 65, 67-72 are rejected under 35 U.S.C. 101 because the claims are directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. *Id.* at 1551.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-10, 13, and 16-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Sidney et al (US 5,206,118).

Re claims 1-5, and 8, Sidney discloses a dosimeter device fabricated from a translucent (Col. 21, 31-47) polymer, such as polyurethane (Col. 10, 58-68), and one or more reporter molecules, such as fluoran (Col. 6, 40-53), dispersed within said device (Abs.).

Re claims 9, 10 and 13, Sidney discloses using chloroform as an activator (Col. 9, 18-25).

Re claim 16, Sidney discloses the use of polyurethane as the optical plastic (Col. 10, 58-68). Furthermore, the method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Re claims 17-29, refer to the rejection of claim 16.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 7, 14, 15, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidney et al.

Re claims 6 and 7, Sidney discloses one or more reporter (Col. 6, 40-53), but fails to specify the type of reporter used comprises triarylmethane or triarylmethane lactone. It would have been an obvious matter of design choice to modify Sidney with a reporter comprising one of the elements recited, since applicant has not disclosed that the specific recited elements solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any reporter molecule.

Re claims 14 and 15, Sidney discloses a (UV) stabilizer (Col. 19, 5-23), but fails to specify the type of stabilizer used. It would have been an obvious matter of design choice to modify Sidney with a UV stabilizer comprising one of the elements recited, since applicant has not disclosed that the specific recited elements solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any UV stabilizer.

Re claim 63, Sidney discloses the claimed invention, but fails to specify erasing the data from said dosimeter. However, within the art of dosimeters, it is well known and conventional

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that heating a dosimeter can erase or anneal any accumulated radiation dosage. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sidney to include means for erasing said data from said dosimeter in order to provide a reusable and recyclable dosimeter.

Claims 38-42 and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidney et al. in view of Moscovitch (US 5,498,876).

Re claims 38 and 50, Sidney discloses a shaped solid dosimeter subjected to radiation (Col. 3, 50-66), wherein said dosimeter is fabricated from a translucent (Col. 21, 31-47) polymer, such as polyurethane (Col. 10, 58-68), and one or more reporter molecules, such as fluoran (Col. 6, 40-53), dispersed within said device (Abs.). Sidney fails to explicitly disclose analyzing three-dimensional data from said dosimeter. Moscovitch discloses a method comprising the step of analyzing three-dimensional data from a dosimeter exposed to radiation, by evaluating optical properties of said dosimeter (Col. 4, 29-54). It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sidney to include the step taught by Moscovitch in order to obtain a measure of the spatial distribution of radiation dose within said dosimeter.

Re claims 39-41 and 51-53, Sidney discloses a dosimeter sensitive to high-energy radiation (X, neutron, and ionizing radiation) (Col. 2, 15-31).

Re claims 42 and 54, Sidney discloses the use of a spectrophotometer (Col. 11, 25-32).

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Claims 43, 44, 46, 47, 55, 56, 57, 59, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sidney et al. and Moscovitch, and further in view of Appleby (US 6,621,086).

Re claims 43, 44, 46, 47, 55, 56, 59, and 60, Sidney and Moscovitch disclose a method according to claim 38, comprising the step of analyzing three-dimensional data from a dosimeter exposed to radiation, by evaluating optical properties (detecting light, calculating amount and distribution) of said dosimeter (Col. 4, 29-54), and displaying the dose information extracted. Sidney and Moscovitch fail to explicitly teach the step wherein detected light is processed to construct a three dimensional image. However, in the field of endeavor, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the method taught by Sidney and Moscovitch, by constructing a three dimensional image of the dose information constructed in order to determine the radiation energy as a function of the spatial distribution within the dosimeter.

Re claim 57, Sidney discloses means for detection (Col. 12, 47-56) but fails to specify the type of detector. It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Sidney to include a CCD since it was known in the art that CCD can be used to detect high-energy radiation as taught by Moscovitch (Col. 13, 9-15).

### **Election/Restrictions**

Applicant's election with traverse of Group I, claims 1-29 and 38-72, in the reply filed on 4/11/05 is acknowledged. The traversal is on the ground(s) that a search of Group I would uncover the process of Group II. This is not found persuasive because prior art (Sidney et al.) discloses the claimed invention can be made by another and materially different process.

The requirement is still deemed proper and is therefore made FINAL.

Claims 30-37 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in the reply filed on 4/11/05.

### **Allowable Subject Matter**

Claims 45, 48, 49, 58, 61, 62 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Re claims 45 and 58, prior art discloses a tomographic method to image accumulated radiation from the dosimeter, but fails to teach or suggest a step wherein the dosimeter is rotated and repeating steps d, e, and f.

Re claims 48, 49, 61, and 62 recite the limitation of a radionuclide source.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus H. Taningco whose telephone number is (571) 272-1848. The examiner can normally be reached on M - F 8:00 - 5:30.




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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MT



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